

remark Oberthür had made about his specimens from Sicily, Syria and the Taurus in 1915, Vol. X., p. 409, suggesting they were probably specifically distinct, both from *boeticus* and from the newly discovered *stauderi* of Africa. His figures certainly suggest something very different. Reverdin, *l.c.*, p. 229, had already pointed out that the Syrian example of Oberthür's fig. 607 must be a *stauderi* rather than a *boeticus* or a *laratherae*. Since then he has distinguished *l.c.* 1915, p. 203, a new species from Asia Minor (*tauricus*). The connection between these *Erymnis* will have to be settled by an examination of the genitalia and other points in their structure. Anyhow the Syrian (*Akkès*) race of fig. 607 differs prominently from all its allies and a name is necessary to designate it; *ambigua*, mihi. I regret I cannot, myself, clear up its exact position and give a full description. The *stauderi* I possess from Algeria, dated August, is quite different in colouring from the typical specimens of May figured by Reverdin, by being saturated on both surfaces with bright fulvous, very reddish in tone; on the upperside of the forewing there are no greenish gray suffusions; these are replaced by chestnut and the black patches by deep chestnut on both wings; on the underside the black of the forewing is not mixed with greenish but with reddish scales and the hindwing is, especially in the female, of a beautiful warm salmon colour. The May specimen figured by Oberthür (fig. 608) as *boeticus*, but obviously a *stauderi*, differs less from mine, but it is much less reddish. Mine, no doubt, is the generation which grows up in the parched summer season: *fulvissima*. The extreme opposite colouring is to be seen in some spring examples, which are of a cold, dark gray tone with a slight violet sheen (form **obscurata**, mihi.).

Erymnis altheae, Hb. race *floccifera*, Z.: I. gen. *floccifera*, Z., *Isis*, 1847, p. 286; II. and III. gen. *australiformis*, Vrtý., *Ent. Rec.*, 1919, p. 27.—Reverdin, *l.c.*, p. 285, very rightly points out that Zeller's *floccifera*, described from April and May specimens of Syracuse and also one female of August 27th from Rome, is nothing but *altheae* and not *marrubii*, as supposed by Staudinger, followed by other authors. The name should thus be revived for the I. gen. of Sicily, which spreads also to the whole of Peninsular Italy. It differs from the Alpine *altheae* by being a little smaller, the black markings are less deep in tone and lesser in extent, so that the general aspect is lighter and more variegated; there is often a slight fulvous tinge on both surfaces, especially in the female sex, and the tuft of hair on the underside of the male is nearly always partly fulvous and often entirely so, as described by Zeller. A Sicilian specimen is figured by Oberthür, pl. 64, fig. 613.

(To be continued.)

Notes on a Brood of *Parasemia plantaginis*, L., and var. *hospita*, W.V.

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Looking through my diary for 1901 I found I had made careful notes of a brood of *Parasemia plantaginis*, the offspring of a female with yellow hindwings and red abdomen taken at Rannoch earlier in the year. The brood consisted of 30 females all with yellow hindwings, 26 of which had red abdomens and 4 yellow abdomens, and 27 males,

21 typical and 6 var. *hospita*. Three were found dead inside their pupa cases, 2 typical males and 1 *hospita*. If these be added, there were 30 males, 23 typical and 7 var. *hospita*, roughly 3:1.

In the British Isles there are, putting aside variations in the black markings, three female forms, one with red hindwings and red abdomen, one with yellow hindwings and red abdomen, and one with yellow hindwings and yellow abdomen. Females with red hindwings do not correspond with *hospita* males as Barrett appears to think, nor do those with yellow bodies. I have bred the latter, in a brood in which all the males were typical, from Berkshire, where *hospita* does not occur.

It is the only lepidopteron known to me, which appears to have a recurrent form peculiar to the male as well as one peculiar to the female, although *Abraas grossulariata* is reputed to be another. It has been stated that radiation of the hindwings in var. *varleyata* is sex-linked with maleness, and that it is associated with a lethal factor. Porritt however has bred radiated females, and also finds that the two sexes are equal in numbers, if the broods are large.

Careful breeding experiments are greatly needed to explain how this can happen in *plantaginis*. 'Notch' wing in *Drosophila melanogaster* is a character only found in females, and there are many in this species found only in males. In this case the explanation is that 'notch' is sex-linked, dominant in its effect on the wings and recessive in its lethal effect. Therefore every female heterozygous for 'notch' has families with twice as many females, half of which are 'notch,' as of males. The other half of the males, which would have 'notch' wings die during development. The equality of the sexes in my family of *plantaginis* is against the view that a lethal factor is operating. It may be that males and females with the same genetical constitution are different in their outward appearance, as Gerould has shown to be the case in *Colias*. In this genus males heterozygous or homozygous for white, which is a dominant character, develop yellow pigment just like those homozygous for yellow. Gerould considers, that the more rapid development of the male prevents the change from yellow to white pigment from taking place, but his explanation cannot apply to *plantaginis*, in which the more slowly maturing female sex fails to form a white pigment.

Gerould, J. A. *Genetics*, 1923, VIII., pp. 495-551.

Morgan, T. H. Carnegie Institution of Washington. Publication No. 278, p. 345.

Experiments in Inheritance of Colour in Lepidoptera. Report of the Committee, British Association, 1921.

Porritt, G. T. *Ent. Month. Mag.* 1922, LVIII., pp. 131-134.

NOTES ON COLLECTING, etc.

NOTES ON EARLY APPEARANCES IN 1925.—In spite of the appalling weather I have been out once or twice. On February 1st I beat a few small larvae of *Thera variata*, and on February 11th I found an example of *Asphalia flavicornis* on a tree trunk: surely a very early date. On February 18th I beat the spruce in Cranbury Park and got, not only larvae of *T. variata*, but one pupa of that species, as well as three *Sarothripus revayana*, and *Tortricodes tortricella* (*hyemana*). On the 21st